Subject: Minutes: DSS-13 Weekly Meeting 8-11-08
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Date: Tue, 12 Aug 2008 15:19:07 -0700
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Minutes: DSS-13 Weekly Meeting on 8-11-08

DSS-13 Antenna Activities: The 4K higher noise temperature problem at S-band has been resolved. The problem is at the incorrect radiometer calculation in the control room. After replacing a cable and a power meter, the S-band system noise temperature is now back to normal value of about 43K. The system noise temperature at X-band is also at normal level of about 37K.
Gary submitted July- and August-monthly-logs.

Full Sky 4th Order Pointing Model: D. Rochblatt is at CDSCC and plans to be back on 9/15/08. I had a discussion with David before he left for CDSCC. David will try to find time to work on the pointing model when he gets back from CDSCC. He also has to find a new software engineer to replace Phil Withington who is on a very long medical sick leave.

DSS-13 Remote Operations: There is a plan to have a prelim demo among our working team at SPC-10 on Thursday, 8/14/08. The demo is about the web based DSS-13 and DSS-28 surveillance cameras at SPC-10. Ryan Dorcey, a systems programmer from Lewis Center for Educational Research agrees to provide us with his support and will be at GDSCC during the prelim demo. He will be a very helpful individual on this task.

For the study work on bringing the IF signals from DSS-13 and 70m R&D cone to ACME at SPC-10, Jim Harris informed Gary that there was no problem with the fiber optic from DSS-13 to SPC-10. However we have not got a confirmation for the link from 70m to SPC-10. Gary will follow up on this. Bill L. contacted Chuck Snedeker and asked him about the requirements related to the connection of DSS-13 IF to ACME.

Bandwidth and Band-limit of Ka-band System: M. Franco submitted his report last week. The report shows the noise temperature contribution from the X/Ka dichroic of 2.82K and the 3 dB bandwidth of the Ka-band system with the dichroic in place is 2.27 GHz. Without the dichroic, the 3 dB bandwidth is widened to at least 7 GHz.
There is some concern. The mirror at the top of the Ka-feed is a Ka/Ka dichroic which allows RF signal from 34.2-34.7 GHz to pass through and the signal sees room temperature. This will have impact on the bandwidth (reduce BW). We plan to do more test with Al tap or a plate covered the Ka/Ka dichroic.

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